RUPMENU

USER'S GUIDE

A User-Friendly System for the Rural-Urban Projection (RUP) Population Projection Program

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INTRODUCTION

The RUPMENU system is a user-friendly interface for the Rural-Urban Projection program (RUP). It also integrates the RUPAGG program, which allows aggregations of multiple RUP projections. The RUPMENU system allows you to create, modify, copy, and run RUP and RUPAGG input files and produce results on the screen, in an ASCII file, Lotus 1-2-3 files, or printed tables. This replaces the RUPPRINT program described in Eduardo Arriaga and Associates, 1994, Population Analysis with Microcomputers, vol. II, pp. 308-309 and the need to use WordPerfect or Lotus 1-2-3 to create the input files (pp. 311-316).

This user's guide will describe the different options available in the system, with hints on how they can be used most effectively.

After the RUPMENU system has been installed on your computer, refer to the sections "COMMAND LINE PARAMETERS" and "BATCH FILES" at the end of this manual to make sure the program works properly.

BASIC CONCEPTS

RUP

The RUP (Rural-Urban Projection) program is a cohort-component population projection computer program (Arriaga, 1994, vol. II, Chapter 5). The program can project one area (e.g. a country, the rural or urban portion of a country, or a province of a country) or two areas (e.g. the urban and rural parts of a country, or the total country and the urban part). When two areas are projected, the sum (or difference) of the two areas can also be computed. The RUP program needs an input file that describes the desired projection.

The RUP input file is an ASCII file of 80-character records that define the initial state of the population, and the changes in the fertility, mortality, and migration over time. The RUPMENU system assumes that RUP input files have the ".IN" extension. When RUP reads the input file, it creates a listing file that contains an echo of the input data, as well as information about how the data have been processed and error and warning messages about the input data and/or the projection.

When the projection is run, the program creates **output files**. RUP can create two types of output files, formatted table files and RUP-formatted data files. The formatted table files are ASCII files with FORTRAN-type carriage control characters in column 1 of each record. These formatted table files are the

ones used by the RUPMENU system. The RUP-formatted output files are 80-character ASCII files formatted like the RUP input file. This can be useful for transmitting projection results into another RUP input file.

The intermediate files are created in RUP by including CODE records in the RUP runs (see Arriaga, 1994, vol. II, p. 332). These files are used by RUP for two area projections in order to create the sum or difference. These files can also be used by RUPAGG (see below) to aggregate several projections.

RUPAGG

The RUPAGG program allows the addition or subtraction of RUP projection intermediate files (U.S. Bureau of the Census, 1994, "RUPAGG: Aggregation of RUP Projections").

The RUPAGG input file contains information about the aggregation desired, including the beginning and ending years, and the RUP intermediate files to aggregate. The RUPMENU system assumes that RUPAGG input files end with the ".AGG" extension. The program can either add or subtract the intermediate files, so that after running RUP projections for the total country and all but one province, the residual province can then be computed by subtracting the given provinces from the total country.

RUPAGG can produce all of the same types of output as RUP, including: listing file, output files, and intermediate files. The intermediate files created can then be aggregated in RUPAGG runs.

User directory

This is a directory where a projection is developed, allowing editing of input files and examination of the results. The user directory is assumed to be under the user's control with the capability to read, write, create, and delete files. The user directory can also be used to run input files copied from the archive directory with, for example, changes to the output parameter records.

Archive directory

The archive directory is a source of multiple input files, and possibly output files. The archive directory is considered a read-only directory, where the files can be read, but no files can be changed or created. On a network system, this allows multiple users to access projection files. Archive files can also be kept on diskette. A diskette archive is particularly useful for storing multiple input files, but in most cases the

user directory should be on a hard disk because of the faster access to the potentially large output files.

RUPFILES.DBF data base file

The RUPFILES.DBF data base file is used to keep track of input files in the User or Archive directory. The RUPFILES data base is the only source of information about the input files on the Archive directory, whereas in the User directory it is supplemented by the information on the directory itself. The RUPFILES data base is updated by the Input>Copy option, and the Input>Update option.

Documentation Conventions

In this documentation, keys that the user should press are shown underlined. Special keys are shown enclosed in angle brackets (e.g. $\langle Enter \rangle$). The key $\langle Alt \rangle$ followed by another key (e.g. $\langle Alt \rangle A$) means hold down the $\langle Alt \rangle$ key and press the A key. Similarly the $\langle Shift \rangle$ and $\langle Ctrl \rangle$ keys should be held down when you press the key that follows (e.g. $\langle Shift \rangle \langle F3 \rangle$ or $\langle Ctrl \rangle Y$).

MAIN MENU

The main menu contains the major options available to the system:

Program Select the program (RUP or RUPAGG).

Input
Select, edit, view, print, or copy input files, or

update the RUPFILES database.

Run the selected program (RUP or RUPAGG) with the

currently selected input file.

Output Select the destination, tables, years, and areas

for output.

Configuration Change the printer settings and user or archive

directories.

DOS Exit to DOS temporarily.

<u>Help</u> Get online help for the menu options.

Exit Quit the RUPMENU system.

Selections can be made by highlighting the desired function and pressing <<u>Enter</u>> or by pressing the first letter of the option.

At the bottom of the screen are two lines. The bottom line is the **status line**. This tells you the current selections, such as the following:

RUP	Ū	File.in	Tables=1 Years=5 Areas=1
Program: RUP or RUPAGG	Source directory: U =User A =Archive	Current input file name	Current output selections

Above the status line is the **message line**. This line displays information about the processing or special keys that you can press.

PROGRAM

The Program option lets you select the program to work with. The choices are RUP and RUPAGG. RUP is the basic projection program, and can project one or two areas (plus their total or difference). The RUP program can create intermediate files that can then be added and subtracted using the program RUPAGG. Once the program has been selected, only the appropriate input and output files will be available to the system until the program choice is changed. In addition, the RUN main menu option will run the selected program. The RUPMENU system assumes that RUP input files have the ".IN" extension, and the RUPAGG input files have the ".AGG" extension.

When the program selection box appears on the screen, highlight the desired program, press <Enter> to select, then <F10> to complete the selection. Selecting a program (even the same program) will clear the current input file selection information. Pressing <Esc> will allow you to exit the Program menu without changing the current selection.

The current program selection is displayed at the left margin of the status line at the bottom of the screen.

INPUT

The input option allows you to select, view, print, or copy RUP or RUPAGG input files.

Input>Select

The select option allows you to select an input file from either the user directory or the archive directory.

User. Select an input file from the User directory. Input files from the user directory can be edited and run, and output tables can be produced.

Archive. Select an input file from the Archive directory. Input and output files from the archive directory can be read, but no files can be changed or created.

After selecting the source of the input file, a pickbox will appear with the possible files to select. If the source is the User directory, the list of files will contain those in the RUPFILES data base file plus any input files in the directory that are not in the data base (these files will display with the file name repeated for the description). If the Archive directory was selected, only the files in the RUPFILES data base will be displayed.

To select an input file, highlight the desired file, press $\langle \underline{\text{Enter}} \rangle$ to mark it, then press $\langle \underline{\text{F10}} \rangle$ to complete the selection. If you change your mind, you can press $\langle \underline{\text{Esc}} \rangle$ to exit from the pickbox. In this case, the prior input file selection (if any) will be retained.

When an input file is selected, the program will read the file to prepare for output.

The currently selected input file name will be displayed on the program status line at the bottom of the screen, as well as the source directory (U=User or A=Archive).

Input>Edit

The Edit option allows you to create or change a RUP or RUPAGG input file. If an input file has been selected, the editor will load in that file, otherwise you will see a blank screen for you to enter a new input file. Only input files from the User directory can be edited.

When the editor reads in the input file it performs several operations to correct potential problems with the file. In particular:

- 1) Blank lines are deleted.
- 2) Lines longer than 80 characters are wrapped to the next line.
- Any characters after the end-of-file character (ASCII decimal code 26 or <Ctrl>Z) are ignored. Some editors will allow editing of characters after the end-of-file character, but others will not. To prevent confusion, the RUPMENU editor will only read characters up to the first end-of-file character (if present).
- 4) Tab characters are converted to four (4) blanks.

The Editor Screen

The top of the Editor Screen contains a summary of the important keys used by the Editor. If you wish to see more of the file, press $\langle \underline{F3} \rangle$ Help to toggle the help information to one line.

The middle of the Editor Screen shows a portion of the input file.

The editor status at the bottom of the screen displays the current status of the editor:

d:\path\filename.in	1:
---------------------	----

The "I" to the right center is displayed when you are in "Insert" mode; it will not show when you are in "Typeover" mode. The Insert/Typeover mode is toggled by pressing the <<u>Insert</u>> key.

The "S" on the status line indicates you are in scroll mode. This means that the cursor stays in the same relative position on the screen while the text moves when the up and down arrows are pressed. This is toggled by pressing $<\underline{F6}>$.

The "W" indicates that the editor is in word wrap mode, which is always true. The margin for the editor has been set to 80 columns, and anything typed after column 80 will be moved to the next line.

Editor Keys

Cursor Mov	rement Keys
< <u>Ctrl</u> >< <u>PgUp</u> >	Top of File
< <u>Ctrl</u> >< <u>PgDn</u> >	Bottom of File
< <u>Pg-Up</u> >	Up one screen
< <u>Pqdn</u> >	Down one screen
< <u>Home</u> >	Beginning of line
< <u>End</u> >	End of line

- <F7> Exit. After pressing <F7> you will be asked whether
 you wish to save the file. The default answer of "No"
 means the input file will remain unchanged. If you
 answer "Y" for Yes, the program will display the file
 name and ask if you want to replace it or not.
- <Insert> Toggle Insert/typeover mode. Insert mode is indicated
 by the box-style cursor and the letter I or letter I or
 the status line at the bottom of the editor screen.
 The initial setting is typeover mode to allow easy
 modification of existing input files. In Typeover
 mode, new lines can be added at the end, but not
 inserted between existing lines.

Block Operations

 $<\underline{\text{Shift}}><\underline{\text{F3}}>$ or $<\underline{\text{F9}}>$ Begin Block. Either of these keys will

indicate the beginning of a block. Pressing either again or pressing $\langle \underline{\text{Esc}} \rangle$ or $\langle \underline{\text{F1}} \rangle$ will cancel the block. After starting a block you can then move to another location in the file and select one of the following options:

<**F4>**

Copy Block. This will put the text from the beginning of the block to the current cursor location into the block buffer. You can then move to a new location in the file and press <Shift><F10> Block Retrieve to insert that text at the cursor location.

<Ctrl><F4>

Move block.

<<u>Ctr</u>l>Y

Delete block. All the text from the beginning block location to the current cursor location will be deleted. The message "Press Shift-F10 to retrieve block" will appear at the bottom of the screen. If you want to delete the block you can ignore this message. Pressing $\langle \underline{Esc} \rangle$ or $\langle \underline{F1} \rangle$ will cause the message to be deleted. If you change your mind, make sure the cursor is where the deleted material should go and press $\langle \underline{Shift} \rangle \langle \underline{F10} \rangle \langle \mathbf{Retrieve} \rangle$. At the prompt "File to retrieve", simply press $\langle \underline{Enter} \rangle$ and the text will be brought back.

<Shift><F10>

Retrieve. Retrieve can also be used to retrieve another ASCII file into the current file. This is useful for duplicating information in several input file (e.g. output options).

Input>View

The View option is similar to the Edit option, but does not allow changes to the file. Either input files or listing files can be examined using the View option.

Input file. Viewing the input file makes it easy to see user or archive input files.

Listing file. Viewing the listing file is useful when an error or warning is generated by the RUP or RUPAGG program. The listing file may also clear up problems with projections (e.g. when the results are unexpected) because the listing file includes an echo of the input file as well as information about how the input data were interpreted. For example, if the population input data are in 5-year age groups, the listing file will contain the single-year split generated by the program. Examination of that data may indicate a problem with the population input.

The major keys to use in the View screen are shown in the following table:

View Scr	een Keys
< <u>Ctrl</u> >< <u>PqUp</u> >	Top of File
< <u>Ctrl</u> >< <u>PgDn</u> >	Bottom of File
< <u>Pg-Up</u> >	Up one screen
< <u>Pqdn</u> >	Down one screen
< <u>Home</u> >	Beginning of line
< <u>End</u> >	End of line
< <u>F7</u> > or < <u>Esc</u> >	Exit

Input>Print

The Print option of the Input menu allows the user to print the contents of the current input file or its associated listing file. The printouts are formatted, and include the filename, date and time printed, and the page number. The input file printout numbers the lines to allow rapid location of the line in the editor if changes are needed.

Input file. Print the current input file.

Listing file. Print the current listing file.

Input>Copy

The Copy option allows you to copy one or more files from the user or archive directory to another location. This option is useful for dealing with input files in the archive directory that need to be modified (e.g. to change the output options) or that need to be rerun (because no output files have been stored in the archive directory).

User. Select input files to copy from the user directory.

Archive. Select input files to copy from the archive directory.

After selecting the source of the input files, a picklist of files to copy will be displayed. For files on the User directory, the list will include the files in the RUPFILES data base as well as any other input files found in that directory. Files found in the directory but not the data base will include the file name as the description. The file list from the Archive directory will only include the information in the RUPFILES database.

Note that only the files with the proper extension for the currently selected program will be displayed for copying (".IN" for RUP and ".AGG" for RUPAGG).

Select the desired input files to copy using the following keys:

Key	Selection
< <u>Enter</u> >	Select currently highlighted input file.
< <u>Alt</u> > <u>A</u>	Select all input files.
< <u>Alt</u> > <u>N</u>	Select no files (undo all selections).
< <u>Alt</u> > <u>R</u>	Select a range of files (see below).
< <u>Esc</u> >	Abort file selection. Return to previous selections.
< <u>F10</u> >	Complete the selection.

When $\langle \underline{Alt} \rangle \underline{R}$ is selected, the highlighted file will be marked and a message box will appear indicating that you should move to the other end of the range of files to copy and then press $\langle \underline{Alt} \rangle \underline{R}$

again. When this is done, all the files from the one highlighted when the first $\langle \underline{Alt} \rangle \underline{R}$ is pressed to the one highlighted when the second $\langle Alt \rangle R$ is pressed will then be selected.

After completing the selection by pressing $\langle F10 \rangle$, a box will appear that asks for the destination directory for the copy operation. If you are copying files from the Archive directory in order to run (or rerun with different output options), then the logical choice for the destination would be the current user directory. You are, however, free to choose any valid directory as the destination.

The program will then display information about the copy operation. If the program detects in the destination directory a file with the same name the file being copied, it will put up a pickbox of options:

- 1. Do not replace this file
- 2. Replace this file only
- 3. No files should be replaced
- 4. All files should be replaced

If you select option 1 or 2, the requested action will be taken, and if other files are later found on the destination directory you will be prompted again about whether to replace the file. If you select options 3 or 4, the corresponding action will be taken for all remaining files in the copy operation, the file found pickbox will not reappear during the current copy operation.

The copy operation will copy the RUPFILES database information to the destination directory creating the RUPFILES.DBF file if necessary.

Input>Update

This option allows you to update the RUPFILES data base. This data base can be used to give a description to each input file. Initially, the description is the same as the input file name.

RUN

The Run option executes the selected program (RUP or RUPAGG) using the selected input file as input. If no input file has been selected, the program will prompt you for the input file name. As the program runs it will display some results on the screen. If there are errors or problems with the reading of the input file or the running of the projection or aggregation, messages will appear on the screen alerting you that a warning or error message has been generated. If these messages appear, the first thing to do is to examine the input listing file using the Input/View/Listing file options to see the error or warning messages, and to see the interpretation of the input file.

When the programs are run, a batch file will make the user directory the default directory. This means that the intermediate file names entered in RUPAGG input files need not specify the drive or path if they are in the same directory as the input file (the user directory).

OUTPUT

The Output option allows you to work with the output files created by RUP or RUPAGG. The options give you control over the destination of the output, and the tables, years, and areas (e.g. total, urban, or rural) to output.

Output > Destination

The destination option allows you to determine whether the output should go to the screen, the printer, or to an ASCII file. The Lotus files option is currently available only for the 5-year age-group table.

Screen. The screen option will present the tables in a scrollable view format. See the Go option below for more details.

Printer. The printer option will cause the data to be printed to the current printer. See the Configuration/Printer options for more details on selecting the printer. The printed output will be the same as the printed output formerly obtained using the program RUPRINT. The only difference is that summary tables 1 and 2 can be printed for selected years, if desired, and the exponential growth rate printed for table 1 will be computed based on the printed population figures.

ASCII file. The ASCII file option will direct all the output to an ASCII file. This allows the user to import the results into a wordprocessor. The ASCII file output will include the formfeed character (ASCII code 12) to indicate page breaks, and these will be interpreted as page breaks by WordPerfect. The other feature of the ASCII file output is that the summary tables will only have one header and no page breaks. This allows easier importing of the data into a spreadsheet. Printing these tables in a wordprocessing program (such as WordPerfect) or a spreadsheet program (such as Lotus 1-2-3) can be accomplished by instructing the program to print the header on each page.

Lotus file. This will create a Lotus 1-2-3 WK1 file. This is currently available only for the 5-year population output.

Output > Tables

The tables option allows you to select the tables to output. Summary tables 1 and 2 are always produced by RUP and RUPAGG, but the other types of output are controlled by the output parameters in the input file. This means that if life tables were not requested in the input file, by including an OMX record, then you will not be able to produce output of life tables. If this occurs, simply edit the input file to include the proper output parameter records and re-run the projection. (If the projection is in the archive directory, you must first copy the input file to a user directory before editing and running.)

Key	Selection
< <u>Enter</u> >	Select currently highlighted table.
< <u>Alt</u> > <u>A</u>	Select all tables.
< <u>Alt</u> > <u>N</u>	Select no tables.
< <u>Alt</u> > <u>R</u>	Select a range of tables.
< <u>Esc</u> >	Abort table selection. Retain previous selections.
< <u>F10</u> >	Complete the selection.

Output > Years

The years option allows you to select the years to output. A list of all the years available in the projection will be presented.

Key	Selection
< <u>Enter</u> >	Select currently highlighted year.
< <u>Alt</u> > <u>A</u>	Select all years.
< <u>Alt</u> > <u>N</u>	Select no years (undo all selections).
< <u>Alt</u> > <u>R</u>	Select a range of years (see below).
< <u>Esc</u> >	Abort year selection. Retain previous selections.
< <u>F10</u> >	Complete the selection.

Output > Areas

This option allows you to select the areas to output. For single-area projections, the single area will automatically be selected. For two-area projections, the default is the area designated "T O T A L" (as indicated by the inclusion of the TOT parameter record). For multi-area projections you can use this option to select one or more of the areas to output (e.g. total, urban, or rural).

Key	Selection
< <u>Enter</u> >	Select currently highlighted area.
< <u>Alt</u> > <u>A</u>	Select all areas.
< <u>Alt</u> > <u>N</u>	Select no areas.
< <u>Esc</u> >	Abort area selection. Retain previous selections.
< <u>F10</u> >	Complete the selection.

Output > Go

This option sends the output for the selected areas, tables, and years to the selected destination. If no data exists for your selections, no output will be produced. Messages at the bottom of the screen will report the progress of the output.

During the output processing, pressing <Esc> should stop the operation and return to the Output menu.

If the destination selected was "screen," then the output will be presented in scrollable view screens. For the summary tables, the whole table (all selected years for the given area) can be viewed together. For the remaining tables, the data for each year/table/area combination will appear in one screen. If multiple tables are selected, or multiple years or areas for a single table, after viewing the output for a particular table/area/year combination, you can move to the next table/year/area screen by pressing $<\underline{F7}>$ to exit the current screen. If you wish to stop the output you can press $<\underline{Esc}>$.

CONFIGURATION

The configuration option allows you to change printer settings, and the user and archive directories.

Configuration > Printer

The printer option allows you to change the printer port or type.

Port. This option allows you to select the correct printer port for printed output. Use the cursor keys to highlight the desired port and press Enter to select. After making the selection, press F10 to complete the selection. Pressing Esc will cause the previously selected port to be retained.

Type. This option allows you to select the printer type. Presently there are only two choices:

Laser (HP-compatible) and Dot Matrix (Epson-compatible). The printer type options determine the printer codes sent to change to condensed print for printed output from the program.

Configuration > User directory

This option allows you to change the current user directory. The user directory is where the user can edit and run input files. When this option is selected, a box will appear requesting the new user directory. The current user directory will be displayed, which can be modified or replaced.

Configuration > Archive directory

This option allows you to change the current Archive directory. The user directory is where centralized input files (and possibly output files) are stored. When this option is selected, a box will appear requesting the new Archive directory. The current Archive directory will be displayed, which can be modified or replaced.

Configuration > Save configuration

This option allows you to save the current configuration (directories and printer values) in the current or a new configuration directory. This is useful for setting up a configuration in a particular directory for a special project. If you specify a new configuration directory to save the current configuration, you can retrieve that configuration at a later

time by either (1) specifying that directory as the first parameter or the RUPMENU command line or (2) selecting **Configuration > Read Configuration** (see below). Note that the current configuration is always saved to the current configuration directory when you exit RUPMENU.

Configuration > Read configuration

This option allows you to select a different configuration directory once RUPMENU is running. As explained above, this allows you to change to a different "project" where you have defined the user and/or Archive directories in a particular way (as well as the print options). Although the Configuration directory may often be the same as the User directory, it need not be the case. For example, if a project or archive has two directories C:\AFRICA\USER and C:\AFRICA\ARCH for the User and Archive directories, the logical place to store the configuration file would be in the directory C:\AFRICA.

DOS

Selecting this option causes the program to exit temporarily to DOS. This can be useful for doing a quick directory, renaming a file, or other similar operation in DOS. Once you are finished in DOS, type EXIT at the DOS prompt to return to RUPMENU.

HELP

The Help option provides online descriptions of the various main menu options.

EXIT

Selecting exit, by pressing Enter when the Exit option is highlighted or pressing the letter "E" when a top line menu is highlighted will end the RUPMENU program. When you quit the program in this way, the program will write out a small configuration file named RUPMENU.CFG with the archive and user directories, and the printer port and type. This file will be read in the next time you enter RUPMENU (if the RUPMENU.CFG file is in the configuration directory, see below) and return to the settings recorded there.

COMMAND LINE PARAMETERS

The RUPMENU program is executed by typing RUPMENU at the DOS prompt. You must be in the RUPMENU program directory in order for the program to run. Up to three parameters can be sent to RUPMENU:

- 1. The configuration directory. This is the location of the configuration file, RUPMENU.CFG.
- 2. The Archive directory.
- 3. The User directory.

The directory information can also be obtained from the RUPMENU.CFG file. The RUPMENU.CFG file is a small ASCII file where the program stores information about the directories and printer settings.

The following table indicates where each of the directories used in the program are specified:

Directory	Precedence list
Configuration	(1) parameter 1, (2) EXE
Archive	(1) RUPMENU.CFG, (2) parameter 2, (3) EXE
User	(1) RUPMENU.CFG, (2) parameter 3, (3) same as configuration, (4) EXE

Notes:

parameter # = parameter number # on the RUPMENU command line (if

present)

EXE = the program directory (where the RUPMENU.EXE file

is located)

RUPMENU.CFG = stored in the RUPMENU.CFG file (if found) from a

previous run

For example, if the RUPMENU system is set up in a directory named "RUPMENU" on the C: drive, then the command:

C:\RUPMENU>RUPMENU C:\USER\ C:\ARCH\ C:\USER\

would look for the RUPMEMU.CFG file in the directory C:\USER. If RUPMENU.CFG is found there, the archive and user directories will be read from there. Otherwise, C:\ARCH will be the initial archive directory and C:\USER will be the initial user file. Note that according to the precedence list above, the third parameter is not necessary if it is the same as the configuration directory (the first parameter).

In a network situation, the configuration file should be stored in an easily identified location, such as the users "home" directory. The archive directory should generally be set up to have read only permission for most users. For example, if users logging onto the network are connected to a user-specific directory on the G: drive, then the command could be:

G:\HOME\USER>RUPMENU G: H:\ARCH I:\BRAZIL

where H:\ARCH is the archive directory and I:\BRAZIL is the user directory.

BATCH FILES

RUPM.BAT

Standalone machine. To ease running the RUPMENU system, the sample batch file RUPM.BAT should be used. This batch file specifies the location of the RUPMENU program files and the other directories as well as setting some DOS environmental variables that improve the program execution. The sample single-user batch file RUPM.BAT batch file contains the following commands:

```
@ECHO OFF
  SET CLIPPER=F49;SWAPPATH:'C:\TEMPFILE'
  SET TMP=C:\TEMPFILE
  IF NOT EXIST C:\TEMPFILE\NUL MD C:\TEMPFILE
  C:
  CD \RUPMENU
  RUPMENU %1 %2 %3
```

The RUPM.BAT file can be edited to include the proper program file location and then should be copied to a directory in your PATH, so that it can be executed regardless of what directory you are in.

Network. On a Novell network, the batch file might look like this:

```
@ECHO OFF
   SET CLIPPER=F49;SWAPPATH:'C:\TEMPFILE'
   SET TMP=C:\TEMPFILE
   IF NOT EXIST C:\TEMPFILE\NUL MD C:\TEMPFILE

MAP T:=APPS:RUPMENU > NUL
   MAP R:=SAPS:RUP\CURRENT > NUL

IF "%1" == "" GOTO NOPARM

T:
   RUPMENU %1
   GOTO FINI

:NOPARM
   T:
   RUPMENU %S_FILEDIR%

:FINI
   G:
```

In this sample, the G: drive is the location of the user's home directory, the environmental variable %s_filedir% is the home

directory name, T:\RUPMENU is the location of the RUPMENU programs, and R:\RUP\CURRENT is the location of the archive files.

RUPB.BAT

RUPB.BAT is used by the program to log onto the user directory before running the RUP program. The sample file looks like this:

%3
CD %2
C:\RUPMENU\RUP %1

The RUPMENU program sends three parameters to the batch file:

- 1. The input file name
- 2. The user directory (without drive)
- 3. The user drive (if specified)

In this sample, the location of the RUP program is specified as "C:\RUPMENU\." If you have installed the program in another location, you must edit this batch file to include the drive and directory where the program was installed.

RUPAGGB.BAT

The RUPAGGB.BAT file is identical to the RUPB.BAT file except it specifies the RUPAGG program instead of RUP. Any changes made to the RUPB.BAT file should also be made to the RUPAGGB.BAT file.